

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Canceled).

Claim 14 (New): A carbon-insertion-type palladium metal wherein an amount of inserted carbon is 0.16 mol or more with respect to 1.0 mol of a palladium metal.

Claim 15 (New): A carbon-insertion-type palladium metal wherein a crystal face distance of a (111) face of a palladium metal calculated from a diffraction angle measured by an X-ray diffraction analysis is 2.270 Å or more.

Claim 16 (New): A palladium catalyst comprising the carbon-insertion-type palladium metal according to claim 14.

Claim 17 (New): The palladium catalyst according to claim 16, wherein said palladium catalyst is utilized for the preparation of an α,β -unsaturated carboxylic acid.

Claim 18 (New): A palladium catalyst comprising the carbon-insertion-type palladium metal according to claim 15.

Claim 19 (New): The palladium catalyst according to claim 18, wherein said palladium catalyst is utilized for the preparation of an α,β -unsaturated carboxylic acid.

Claim 20 (New): A method for the preparation of a carbon-insertion-type palladium metal, comprising a step of reducing palladium in a palladium compound in a palladium

compound solution in which the palladium compound having a chlorine content of 0 to 300 ppm is dissolved in a solvent.

Claim 21 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 20, wherein the step is performed at -5 to 150°C.

Claim 22 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 20, wherein the solvent is an organic solvent or a mixed solvent of water and an organic solvent.

Claim 23 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 22, wherein the organic solvent contains at least one selected from the group consisting of carboxylic acids, ketones, and alcohols.

Claim 24 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 20, wherein the reduction step is performed by a reducing agent.

Claim 25 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 24, wherein the reducing agent is an olefin having 2 to 6 carbon atoms.

Claim 26 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 20, wherein an amount of inserted carbon is 0.16 mol or more with respect to 1.0 mol of a palladium metal.

Claim 27 (New): The method for the preparation of a carbon-insertion-type palladium metal according to claim 20, wherein a crystal face distance of a (111) face of a palladium metal calculated from a diffraction angle measured by an X-ray diffraction analysis is 2.270 Å or more.

Claim 28 (New): A method for the preparation of a palladium catalyst comprising preparing a carbon-insertion-type palladium metal according to the method of claim 20.

Claim 29 (New): A method for the preparation of a palladium catalyst comprising preparing a carbon-insertion-type palladium metal according to the method of claim 26.

Claim 30 (New): A method for the preparation of a palladium catalyst comprising preparing a carbon-insertion-type palladium metal according to the method of claim 27.

Claim 31 (New): A method for the preparation of an α,β -unsaturated carboxylic acid in which an oxidation reaction of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in a liquid phase to prepare the α,β -unsaturated carboxylic acid is performed in the presence of the palladium catalyst according to claim 17.

Claim 32 (New): A method for the preparation of an α,β -unsaturated carboxylic acid in which an oxidation reaction of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in a liquid phase to prepare the α,β -unsaturated carboxylic acid is performed in the presence of the palladium catalyst according to claim 19.